



US007763069B2

(12) **United States Patent**
Brady et al.

(10) **Patent No.:** **US 7,763,069 B2**
(45) **Date of Patent:** **Jul. 27, 2010**

(54) **ACCOMMODATING INTRAOCULAR LENS
WITH OUTER SUPPORT STRUCTURE**

(56) **References Cited**

U.S. PATENT DOCUMENTS

(75) Inventors: **Daniel G. Brady**, San Juan Capistrano,
CA (US); **Arlene E. Gwon**, Newport
Beach, CA (US)

1,483,509 A 2/1924 Bugbee
2,129,305 A 9/1938 Feinbloom
2,274,142 A 2/1942 Houchin

(73) Assignee: **Abbott Medical Optics Inc.**, Santa Ana,
CA (US)

(Continued)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 1245 days.

FOREIGN PATENT DOCUMENTS

AU 3225789 10/1989

(21) Appl. No.: **11/322,068**

(Continued)

(22) Filed: **Dec. 28, 2005**

OTHER PUBLICATIONS

U.S. Appl. No. 10/280,918, filed Aug. 5, 2003.

(65) **Prior Publication Data**

US 2006/0161252 A1 Jul. 20, 2006

(Continued)

Primary Examiner—Thomas J Sweet

Related U.S. Application Data

(63) Continuation-in-part of application No. 10/661,410,
filed on Sep. 12, 2003, now Pat. No. 7,150,759, which
is a continuation-in-part of application No. 10/341,
701, filed on Jan. 14, 2003, now Pat. No. 7,025,783.

(60) Provisional application No. 60/348,705, filed on Jan.
14, 2002, provisional application No. 60/372,309,
filed on Apr. 12, 2002.

(51) **Int. Cl.**
A61F 2/16 (2006.01)

(52) **U.S. Cl.** **623/6.37; 623/6.39; 623/6.4;**
623/6.49; 623/6.51; 623/6.22

(58) **Field of Classification Search** **623/6.11,**
623/6.13, 6.14, 6.15, 6.17, 6.18, 6.19, 6.2,
623/6.21, 6.22, 6.24, 6.38, 6.4, 6.43, 6.46,
623/6.47, 6.49, 6.51, 6.52, 6.53, 6.54

See application file for complete search history.

(57) **ABSTRACT**

An intraocular lens for insertion into the capsular bag of an eye contains an optic, an outer periphery, and an outer support structure. The optic has a periphery and centered about an optical axis. The outer periphery is disposed about the optic and configured to engage an equatorial region of the capsular bag of an eye. The outer support structure is disposed along the periphery and spaced from the optic with voids outer support structure and the optic. The intraocular lens further comprises a first intermediate member and a weakened region disposed along the outer periphery between the outer support structure and the first intermediate member. The first intermediate member operably couples the optic and the outer support structure. The weakened region is attached to, and configured to provide relative motion between, the outer support structure and the first intermediate member in response to the ciliary muscle of the eye.

22 Claims, 11 Drawing Sheets

